REMARKS

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

Claims 1-12 are pending in the application.

The Applicants appreciate the Examiner's acknowledgment of receipt of the certified copy of the priority document, as well as consideration of the Information Disclosure Statements.

The informalities in the disclosure have been corrected, as requested by the Examiner. The Examiner's thorough review of the application is sincerely appreciated.

Claims 1-12 stand rejected under § 112, first paragraph, as non-enabling. The Office Action states that the application does not make clear how a running lane is detected based on a variation in the running direction due to the yaw moment generated to prevent the vehicle from deviating from the running lane. The Office Action further explains that the target yaw moment is calculated in step S10 of Figure 2, but that this target yaw moment is not fed back to influence the lane detection shown.

The Applicants would first like to briefly explain the background of the invention, and then the issues raised in the Office Action will be addressed in more detail.

As discussed, for example, from page 5, line 23, to page 6, line 10, of the specification, camera controller 14 is capable of detecting a running lane by detecting a lane marker such as a white line from a forward image of a scene ahead of the vehicle. Please note that the idea of recognizing a lane is known. Please see, for example, U.S. Patent No. 6,823,241 and the other documents submitted in the Information Disclosure Statement submitted herewith. This is described beginning in col. 8, line 53, of the '241 patent. As noted in the first paragraph of col. 10 of the '241 patent, the steering angle (which is called θ) is required in order to recognize a lane. The steering angle is detected by a detector.

The described embodiments of the present application are based on the realization that the angle (or running direction) of the vehicle may change even when the driver is not operating the steering wheel. Lane deviation prevention (LDP) systems may use braking, for example, to change the angle of the vehicle. In other words, the angle of the vehicle may change due to other factors such as LDP braking even though the steering wheel is not being turned.

The described embodiments take into consideration vehicle yaw moment generated by a LDP system in recognizing the lane.

The described embodiments do this by generating a corrected steering angle which is calculated by adding the steering angle equivalent to a target yaw moment (the target yaw moment being generated to change the angle of the vehicle and turn the vehicle into the lane) to the steering angle reflecting the turning of the steering wheel. This is described, for example, on page 8, lines 23-27 of the present application. One advantage of this technique is summarized on page 16, lines 14-18, of the present application.

Turning now to the rejections under § 112, first paragraph, page 8, lines 14-19, explains that step S3 uses the target yaw moment that was calculated in step S10 of the previous processing. In other words, step S3 uses the target yaw moment that was calculated in the previous iteration of the loop shown in Figure 2. This is summarized in step S3 of Figure 2 by saying that the steering angle is calculated "equivalent to target yaw moment." In step S4 the corrected steering angle is calculated and in step S5 the running lane is detected, as discussed above.

It is thus respectfully submitted that one of skill in the art would be able to make and use the claimed invention without undue experimentation based on the description set forth in the application.

Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicants hereby petition for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

Date November 15, 2006

By _____

FOLEY & LARDNER LLP
Customer Number: 22428
Telephone: (202) 672-5426
Facsimile: (202) 672-5399

Glenn Law
Attorney for Applicant
Registration No. 34,371